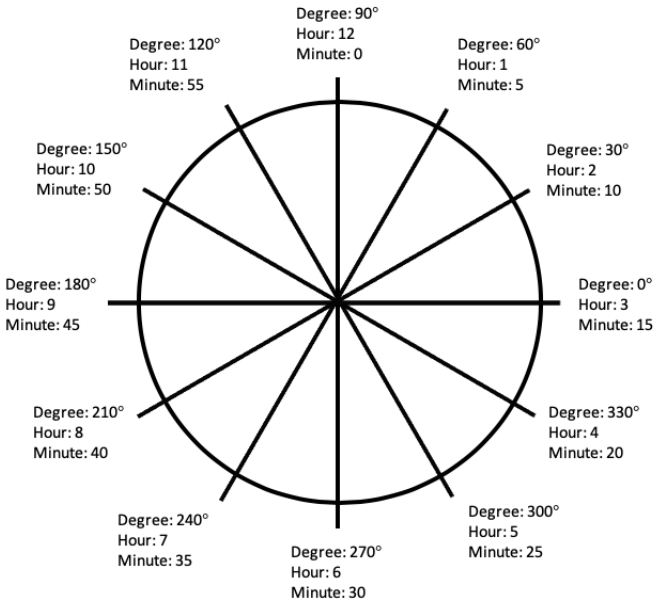
6. Feng

Program Name: Feng.java **Input File: feng.dat**

Feng just learned about the unit circle in her pre-calculus class. As she was leaving class, she realized that the hour and minute hands of an analog clock not only point to their respective hour and minute (representing the current time), but they each also point to a degree in range of [0,359] corresponding to the unit circle representation. (See below figure.) Feng would like your help writing a program that takes in the time, and emits two angles, one for hour, and one for minute, corresponding to the angle (in degrees) each hand would be pointing at.



Input: Input starts with a line containing an integer N, the number of test cases. N will be in range [1,20]. The following N lines contain the time, formatted as HH:MM. HH will be in range [1,12] and MM will be in range [0,59].

Output: For each test case, output the corresponding angle measures each of the two hands would be pointing to.

Hour angle (denoted as `H_Angle` below) and minute angle (denoted as `M_Angle`) will be guaranteed to be in range of [0,359]. Formatting for the output should be "`Hour: H_Angle Minute: M_Angle`"

Note: `H_Angle` and `M_Angle` should be outputted to 1 (one) decimal place.

Sample input:

```
6
08:25
09:18
12:05
03:00
03:01
03:15
```

Sample output:

```
Hour: 197.5 Minute: 300.0
Hour: 171.0 Minute: 342.0
Hour: 87.5 Minute: 60.0
Hour: 0.0 Minute: 90.0
Hour: 359.5 Minute: 84.0
Hour: 352.5 Minute: 0.0
```